

GENERAL CONDITIONS OF THE CONTRACT

SECTION 01500

Approved:

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Section 01500
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GENERAL CONDITIONS
SECTION 01500

01 - Definitions

Where used in the project manual, the following words and terms shall have the meanings indicated. The meanings shall be applicable to the singular, plural, masculine and feminine of the words and terms.

Acceptance: Formal action of the Owner in determining that the Contractor's work has been completed in accordance with the contract and in notifying the Contractor in writing of the acceptability of the work.

Act of God: A cataclysmic phenomenon of nature, such as a hurricane, earthquake or abnormal flood. Rain, wind, high water, or other natural phenomenon which might reasonably have been anticipated from historical records of the general locality of the work shall not be construed as acts of God.

Addenda: Supplemental written specifications or drawings issued prior to execution of the contract which modify or interpret the project manual by addition, deletion, clarification, or corrections.

Bid: Offer of a bidder submitted on the prescribed form setting forth the price or prices of the work to be performed.

Bidder: Individual, partnership, corporation, or a combination thereof, including joint ventures, offering a bid to perform the work.

City: Owner.

Construction Inspector: The person designated, in writing, by the Engineer to act as its representative at the construction site and to perform construction inspection services and administrative functions relating to this contract. Initial contact by the Contractor with the Engineer shall be through the Construction Inspector.

Contract: The writings and drawings embodying the legally binding obligations between the Owner and the Contractor for completion of the work.

Contract Documents: Project Manual.

Contract Drawings: The drawings included in the contract documents, plus those prepared by the Owner and the Contractor pursuant to the terms of the contract. They include:

1. Drawings in Contract Documents for bidding.
2. Modifying drawings issued by addenda.
3. Drawings submitted by the Contractor during the progress of the work and accepted by the Owner either as attachments to change orders or as non-modifying supplements to drawings in Item 1 above and drawings issued by addenda.
4. Drawings submitted by the Owner to the Contractor during the progress of the work either as attachments to the change orders or as explanatory supplements to drawings in Item 1 above and drawings issued by addenda.

Contract Price: Amount payable to the Contractor under the terms and conditions of the contract. Based on the price given on the bidding schedule, with adjustments made in accordance with the contract. The base amount given in the bidding schedule shall be either a lump sum bid or the summation of the unit price bids multiplied by the estimated quantities set forth in the bid form.

Contract Time: Number of calendar days stated in the contract for the completion of the work or portions thereof.

Contractor: The individual, partnership, corporation, or combination thereof, including joint ventures who enter into the contract with the Owner for the performance of the work. The term covers subcontractors, equipment and material suppliers, and their employees.

Contractor's Plant and Equipment: Equipment, material, supplies, and all other items, except labor, brought onto the site by the Contractor to carry out the work, but not to be incorporated in the work.

Day: Calendar day.

Direct: Action of the Owner by which the Contractor is ordered to perform or refrain from performing work under the contract.

Directive: Written documentation of the actions of the Owner in directing the Contractor.

Engineer: The City Engineer of the City of Savannah or the City Project Engineer.

Equipment: Mechanical, electrical, instrumentation, or other device with one or more moving parts, or devices requiring an electrical, pneumatic, electronic, or hydraulic connection.

Furnish: To deliver to the job site or other specified location any item, equipment or material.

Herein: Refers to information presented in the project manual.

Holidays: Legal holidays designated by the City or specifically identified in supplementary conditions.

Install: Placing, erecting, or constructing complete in place any item, equipment, or material.

May: Refers to permissive actions.

Owner: The City of Savannah.

Owner's Representative: The City Engineer, City Bureau Chief, or their representative.

Paragraph: For reference or citation purposes, paragraph shall refer to the paragraph, or paragraphs, called out by section number and alphanumeric designator. For example, this definition is found in Section 01500, Paragraph 01; permits and regulations are discussed in Section 01500, Paragraph 03.

Person: The term, person, includes firms, companies, corporations, partnerships, and joint ventures.

Project: The undertaking to be performed under the provisions of the contract.

Project Manual: Those contract documents prepared for bidding and as amended by addenda.

Provide: Furnish and install, complete in place.

Punch List: List of incomplete items of work and of items of work which are not in conformance with the contract. The list will be prepared by the Engineer when the Contractor (1) notifies the Engineer in writing that the work has been completed in accordance with the contract and (2) requests in writing that the Owner accept the work.

Shall: Refers to actions by either the Contractor or the Owner and means the Contractor or Owner has entered into a covenant with the other party to do or perform the action.

Shown: Refers to information presented on the drawings, with or without reference to the drawings.

Specifications: That part of the contract documents consisting of written descriptions of the technical features of materials, equipment, construction system, standards, and workmanship.

Specify: Refers to information described, shown, noted or presented in any manner in any part of the contract.

Submittals: The information which is specified for submission to the Owner in accordance with Division of the project manual.

Substantial Completion: Sufficient completion of the project or the portion thereof to permit utilization of the project, or portion thereof for its intended purpose. Substantial completion requires not only that the work be sufficiently completed to permit utilization, but that the Owner can effectively utilize the substantially completed work. Determination of substantial completion is solely at the discretion of the Owner. Substantial completion does not mean complete in accordance with the contract nor shall substantial completion of all or any part of the project entitle the Contractor to acceptance under the contract.

Substantial Completion Date: Date shown on the certificate of Substantial Completion.

Will: Refers to actions entered into by the Contractor or the Owner as a covenant with the other party to do or to perform the action.

Work: The labor, materials, equipment, supplies, services, and other items necessary for the execution, completion and fulfillment of the contract.

02 - Royalties and Patents

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall hold the Owner harmless from loss on account thereof except that the Owner shall be responsible for all such loss when a particular manufacturer, product, or process is specified by the Owner.

03 - Permits and Regulations

Permits, licenses, and easements of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor including, but not limited to, business licenses, street maintenance decals, construction easements,

burning permits, etc. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. Building permit fees as issued by the City of Savannah Department of Inspections shall be paid for by the City.

The Contractor shall comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified.

04 - Verbal Agreements

No verbal agreement or conversation with any officer, agent or employee of the Owner either before, during or after execution of this Contract, shall affect or modify any of the terms of obligations contained in any of the documents comprising said Contract.

05 - Lands for Work

The Owner shall provide, as indicated on the drawings and not later than the date when needed by the Contractor, the Lands upon which the work under this Contract is to be done, rights-of-way for access to same, and such other lands which are designated on the drawing for the use of the Contractor. Any delay in the furnishing of these Lands by the Owner shall be deemed proper cause for an equitable adjustment in both contract price and time of completion.

The Contractor shall provide at his own expense and without liability to the owner any additional land and access thereto that may be required for temporary construction facilities, or for storage of materials.

06 - Guarantee Against Defective Work

The Contractor shall guarantee the work required under this Contract for a period of twelve months from the date of Final Acceptance (may be Substantial Completion if defined in Section 1600). The Contractor shall remedy, at his own expense, and without additional cost to the Owner, all defects arising from either workmanship or materials, as determined by the Engineer. The guarantee shall not cover any accidental or deliberate damage to the work due to normal wear and tear during the guarantee period.

07 - Bonds

The Contractor shall furnish payment and performance bonds with good and sufficient surety or sureties acceptable to the Owner for the protection of persons furnishing materials or labor in

connection with the performance of the work. The penal sum of such payment and performance bond will be 100% of the contract price. The bonds required hereunder will be dated as of the same date as the contract and will be furnished to the Owner at the time the contract is executed. These bonds must be in the form provided herein. **NO OTHER FORM WILL BE ACCEPTED.** These bonds shall be issued from a company licensed to do business in Georgia and shall be signed or counter signed by a Georgia resident agent, and shall have a proper Power of Attorney evidencing the authority of the individual signing the bond. Included with the Bonds shall be a signed **Affidavit** on the form provided herewith.

The Mayor and Aldermen of the City of Savannah may waive performance and payment bonds on contracts less than \$40,000 in value. When this is done, the Special Payment Provision given in Section 1500, Paragraph 74 shall apply.

08 - Contractor's Insurance

(a) Liability. The Contractor shall maintain such insurance as will protect him from claims under workmen's compensation acts and from any other claims for damages to property, and for personal injury, including death, which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or anyone directly or indirectly employed by either of them. Certificates of such insurance shall be filed with the Owner, and shall be subject to his approval for adequacy of protection. The Contractor shall be responsible for providing adequate limits of insurance when working within property owned by railroads, as established by such railroad company.

(b) Indemnity. The Contractor shall indemnify and save harmless, the Owner from and against all losses and all claims, demands, payment, suits, actions, recoveries, and judgments of every nature and description brought or recovered against the contractor by reason of any act or omission of the said Contractor, his agents or employees, in execution of the work or in the guarding of it.

***The limits of insurance are as follows:**

Comprehensive General Liability - policy covering bodily injury and property damage including premises, operations, products, and completed operations.....\$1,000,000 per occurrence
\$2,000,000 aggregate:

Automobile Liability - policy covering injury and property damage.....\$1,000,000
Umbrella Policy.....\$1,000,000
Builders Risk.....\$Amount of Contract

***Contractors Liability Insurance shall be effective for the duration of the work as described in the contract documents, including authorized change orders, plus any period of guarantee as required in Section 01500, Paragraph 06.**

09 - Liens

Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a complete release of all claims or liens arising out of this Contract and an affidavit that so far as he has knowledge or information the release and receipts include all the labor and materials for which a lien or claim could be filed; but the Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish an additional bond satisfactory to the Owner, to indemnify the Owner against any claim or lien (in cases where such payment is not already guaranteed by Surety Bond). If any claim or lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay on discharging such a lien, including all costs and a reasonable attorney's fee.

10 - Assignment

The Owner shall have the right to reject the assignment or sub-letting of any portion of the Contract by the Contractor. Assigning or sub-letting the Contract shall not relieve the Contractor or his surety from any Contract obligations.

11 - Joint Venture Contractor

In the event the Contractor is a joint venture of two or more contractors, the grants, covenants, provisos and claims, rights, power, privileges and liabilities of the contract shall be construed and held to be several as well as joint. Any notice, order, direct request or any communication required to be or that may be given by the Engineer to the Contractor under this contract, shall be well and sufficiently given to all persons being the Contractor if given to any one or more of such persons. Any notice, request or other communication given by any one of such persons to the Engineer under this contract shall be deemed to have been given by and shall bind all persons being the Contractor.

12 - Successors' Obligations

The grants, covenants, provisos and claims, rights, powers, privileges and liabilities obtained in the contract documents shall be read and held as made by and with, and granted to and imposed upon, the Contractor and the Owner and their respective heir, executors, administrations, successors and assigns.

13 - Business License

Contractors and subcontractors shall have a current business license, and shall furnish license numbers prior to entering into a contract with the Mayor and Aldermen of the City of Savannah.

14 - Obligations and Liability of the Contractor

The Contractor shall do all the work and furnish all the materials, tools, and appliances, except as herein otherwise specified, and everything necessary for properly performing and completing the work required by the Contract, in the manner and within the time specified. He shall complete the entire work to the satisfaction of the Engineer, and in accordance with the Specifications and Plans herein mentioned, at the prices herein agreed upon and fixed therefore. All the work, labor and materials to be done and furnished under this Contract shall be done and furnished strictly pursuant to, and in conformity with, the Contract Documents, and the directions of the Engineer as given from time to time during the progress of the work, under the terms of this Contract.

All loss or damage arising out of the performance or nature of the work, or any damage to the work itself to be done under this contract or from any unforeseen obstruction or difficulties which may be encountered in the prosecution of the same, or from the action of the elements or from any cause or causes whatsoever, until the same shall have been finally accepted, shall be sustained and paid for by the Contractor.

The Contractor shall coordinate his operations with those of any other contractors who may be employed on other work of the Owner and shall avoid interference therewith and cooperate in the arrangements for storage of materials.

The Contractor shall conduct his work so as to interfere as little as possible with private business and public travel. He shall, at his own expense, wherever necessary or required, maintain fences, furnish watchmen, maintain lights, and take such other precautions as may be necessary to protect life and property.

The Contractor shall take all responsibility for the work done under this Contract, for the protection of the work, and for preventing injuries to persons, and damage to property and utilities on or about the work. He shall in no way be relieved of his responsibility by any rights of the Owner to give permission or issue orders relating to any part of the work, or by any such permission given or orders issued, or by failure of the Owner to give such permission or issue such orders. The Contractor shall bear all losses resulting to him or to the Owner on account of the amount or character of the work, or because of the nature of the land in or on which the work is done is different from what was estimated or expected, or on account of the weather elements or other causes. The Contractor shall assume the defense of all claims arising out of injury or damage to persons, corporations, or property, whether said claims arise out of negligence or not, or whether said claims are for unavoidable damage or not, and from all claims relating to labor and materials furnished for the work and from all expenses incurred in defending or settling such claims, including reasonable attorney's fees.

The Contractor shall so conduct his operations as not to damage existing structures or work installed either by him or by other contractors. In case of any such damage resulting from his own operations, he shall repair and make good as new the damaged portions at his own expense.

The Contractor warrants that he is familiar with the codes applicable to the work and that he has the skill, knowledge, competence, organization, and plant to execute the work promptly and efficiently in compliance with the requirements of the Contract Documents. The Contractor having the obligation to keep a competent superintendent on the work during its progress, to employ only skilled mechanics, and to enforce strict discipline and good order among his employees, the Contractor, himself is responsible for seeing that the work is installed in accordance with the Contract Documents. Failure or omission on the part of the Owner, representative of the Owner, agents of the Owner, Project Representative, clerk-of-the-works, engineers employed by the Engineer, representatives of the Engineer or the Engineer either to discover or to bring to the attention of the Contractor any deviation from, omission from, or non-compliance with the Contract Documents shall not be set up by the Contractor as a defense of failure to his part to install the work in accordance with the Contract Documents or for any other neglect to fulfill requirements of the Contract; nor shall the presence of any one, or all, or any of the foregoing at the site of the fact that any one, or all, or any of the foregoing may have examined the work or any part of it be set up as a defense by the Contractor against a claim for failure on his part to install the work in accordance with the Contract Documents or for any neglect to fulfill requirements of

the Contract. No requirement of this Contract may be altered or waived except in pursuance of a written order of the Owner and in strict accordance with the provisions in the Contract for changes in the work.

15 - Responsibilities of the Contractor

A. Subcontractors, Manufacturers and Suppliers:

The Contractor shall be responsible for the adequacy, efficiency and sufficiency of subcontractors, manufacturers, suppliers and their employees.

B. Contractor's Employees:

The Contractor shall be responsible for the adequacy, efficiency and sufficiency of his employees. Workers shall have sufficient knowledge, skill and experience to perform properly the work assigned to them.

C. Payment for Labor and Materials:

The Contractor shall pay and require his subcontractors to pay any and all accounts for labor including Workers Compensation premiums, State Unemployment and Federal Social Security payments and other wage and salary deductions required by law. The Contractor also shall pay and cause his subcontractors to pay any and all accounts for services, equipment, and materials used by him and his subcontractors during the performance of work under this contract. Such accounts shall be paid as they become due and payable. If requested by the Owner, the Contractor shall furnish proof of payment of such accounts to the Owner.

D. Attention to Work:

The Contractor, acting through his representative, shall give personal attention to and shall manage the work so that it shall be prosecuted faithfully. When his representative is not personally present at the project site, his designated alternate shall be available and shall have the authority to act on the contract.

E. Employee Safety:

The Contractor alone shall be responsible for the safety of his and his subcontractor's employees. The Contractor shall maintain the project site and perform the work in a manner which meets the Owner's responsibility under statutory and common law for the provision of a safe place to work.

F. Public Safety and Convenience:

The Contractor shall conduct his work so as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work and to insure the protection of persons and property. No road or street shall be closed to the public except with the permission of the Engineer and the proper governmental authority. Fire hydrants on or adjacent to the work shall be accessible to fire fighting equipment. Temporary provisions shall be made by the Contractor to insure the use of sidewalks, private and public driveways and proper functioning of gutters, sewer inlets, drainage ditches and culverts, irrigation ditches and natural water courses.

G. Cooperation with the Construction Inspector:

The Contractor, when requested, shall assist the Construction Inspector in obtaining access to work which is to be inspected. The Contractor shall provide the Construction Inspector with information requested in connection with the inspection of the work.

16 - Compliance with Laws

The Contractor shall keep himself fully informed of all existing and future State and Federal Laws, all regulations of the various departments or agencies of the State of Georgia, and municipal ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered, in the Plans, Drawings, Specifications, or Contract for this work in relation to any such law, ordinance, regulations, order, or decree, he shall forthwith report the same to the Engineer in writing. He shall at all times himself observe and comply with, and cause all his agents and employees to observe and comply with, all such existing and future laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner against any claim or liability arising from or based upon violation of any such law, ordinance, regulation, order, or decree, whether by himself or his employees or any subcontractor.

17 - Plans, Specifications and Design

It is agreed that the Owner will be responsible for the accuracy and sufficiency of the plans and specifications. The Owner shall furnish plans and specifications which completely represent the requirements of the work as far as practical to be performed under the Contract. All such drawings and instructions

shall be consistent with the Contract Documents. In the cases of unit-price contracts, the units shown on the unit price schedule have been established for the purpose of uniform bidding and may or may not reflect the actual quantity of units required to perform the work. In the case of lump-sum contracts, plans and specifications which completely represent the work to be done shall be furnished prior to the time of entering into the Contract. The Owner may, during the life of the Contract, and in accordance with Paragraph 01500-82, issue additional instructions, by means of drawings or otherwise, necessary to illustrate changes in the work.

18 - Drawings Furnished

Unless otherwise provided in the Contract Documents, the Owner will furnish to the Contractor, free of charge, up to 5 copies of drawings and specifications necessary for the execution of the work with delivery of the Notice to Proceed.

19 - Ownership of Drawings

All drawings, specifications and copies thereof furnished by the Owner shall not be reused on other work, and with the exception of the signed Contract, sets are to be returned to him on request, at the completion of the work. All models are the property of the Owner.

20 - Reference Standards

Reference to the Standards of any technical society, organization or association or to codes of local or state authorities, shall mean the latest standard, code, specifications, or tentative standard adopted and published at the date of taking bids, unless specifically stated otherwise.

21 - Division of Specifications and Drawings

Specifications and drawings are divided into groups for the convenience of the Owner. These divisions are not for the purpose of apportioning work or responsibility for work among subcontractors, suppliers and manufacturers.

22 - Order of Completion

Within ten (10) days of issuance of the Notice of Award with the work the Contractor shall submit, to the Engineer, a schedule which shall show the order in which the Contractor proposes to carry on the work, with dates at which the Contractor will start the several parts of the work and estimated dates of completion of the several parts.

Monthly progress reports shall be delivered with the pay estimate to the Engineer showing the progress of the past month's construction in relation to the approved work schedule. **No payments will be made to the Contractor until the construction schedule has been submitted by the Contractor and approved by the Engineer.** If the progress report does not agree with the approved work schedule, the Contractor shall deliver in writing an explanation with the report. Upon request from the Engineer, the Contractor shall submit a revised schedule for approval.

23 - Materials, Appliances & Employees

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, supervision and other facilities necessary for the execution and completion of the work. Unless otherwise specified, all materials incorporated in the permanent work shall be new. The Contractor shall furnish satisfactory evidence as to the kind and quality of materials in accordance with paragraph 01500-49.

The Contractor shall at all times enforce strict discipline and good order among his employees, and shall seek to avoid employing on the work any unfit person or anyone not skilled in the work assigned to him. If at any time before the commencement or during the progress of work, tools, equipment and supervision appear to the Engineer to be insufficient, inefficient or inappropriate to secure the quality of work required or the proper rate of progress, the Engineer may order the Contractor to increase their efficiency, to improve their character, to augment their number, or to substitute new tools, plant or equipment, as the case may be, and the Contractor shall conform to such order; but the failure of the Engineer to demand such increase of efficiency, number, or improvements shall not relieve the Contractor of his obligation to secure the quality of work and the rate of progress necessary to complete the work within the time required by this contract to the satisfaction of the Engineer.

24 - Survey Information

The Owner's representative will establish reference bench marks and base line identified on the drawings. From the information provided, the Contractor shall develop and make such additional surveys as are needed for construction, such as control lines, slope stakes, batter boards, stakes for pipe locations and other working points, lines, and elevations. Survey work shall be performed under the supervision of a licensed land surveyor. Contractor shall reestablish reference bench marks and survey control monuments destroyed by this operation at no cost to the Owner.

25 - Inspection of Work

A. General: If the specifications, the Engineer's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, the Contractor shall give the Engineer notice of its readiness for inspection. Such notice shall be a minimum of two working days. If the inspection is by an authority other than the Owner, the Contractor shall furnish the date fixed for such inspection. Inspections by the Owner shall be promptly made and where practicable at the source of supply. If the Engineer instructs the Contractor that inspection of certain phases of the work must be made prior to proceeding, the Contractor shall furnish such inspection, promptly and in such manner as to allow the Contractor to prosecute the work without delay. At such time as the Contractor has completed the work in its entirety the Contractor shall make written request for a final inspection. Such request shall be made no less than seven (7) calendar days prior to the requested date of inspection. An inspection will be made by the Engineer and a determination will be made as to whether or not the work is in fact complete. Acceptance will not be given nor final payment released until all "punch list" items are complete and record drawings have been approved. The "punch list" shall not be considered all inclusive and, therefore, each requested final inspection may generate additional "punch list" items as the Contractor is responsible for completion of all work described in the contract documents.

B. Authority of Construction Inspector: The Construction Inspector is the construction site representative of the Engineer. The Engineer has delegated his authority to the Construction Inspector to make initial decisions regarding questions which may arise as to the quality or acceptability of materials furnished and work performed and as to the manner of performance and rate of progress of the work under the contract.

The Construction Inspector interprets the intent and meaning of the contract and makes initial decisions with respect to the Contractor's fulfillment of the contract and the Contractor's entitlement to compensation. The Contractor shall deal solely with the Construction Inspector.

C. Inspection of Construction: The Construction Inspector shall have access to the work and to the site of the work and to the places where work is being prepared or where materials, equipment, and machinery are being obtained for the work. If requested by the Construction Inspector, the Contractor shall provide the assistance necessary for obtaining such access, and shall provide information related to the inspection of construction.

D. Change Orders: The Construction Inspector has the authority to initiate or recommend change orders. Such change orders are subject to review and approval by the Owner.

26 - Inspection and Testing of Materials

The Owner shall provide inspection and testing of all materials and workmanship by a testing lab incorporated in the work. Inspection and testing of materials and workmanship shall be at the owner's discretion and for the purpose of establishing that all material and workmanship have been provided in general accordance with the contract documents. The Contractor shall give to the Owner a minimum of 48 hours notice (not to include weekends and holidays) prior to placement of any concrete, fill material, backfill material, street base or sub-base material. Failure of the Contractor to give such notice shall be cause for the Owner to suspend operations of the Contractor which may impact testing. Such suspension of the Contractor's operations shall not be considered an unavoidable delay and any loss sustained by the Contractor shall be borne by the Contractor. The Contractor shall schedule tests with the lab and also notify the construction inspector of this action. The Contractor shall be responsible for the payment of retesting of failed tests and for standby costs due to the failure of the Contractor or their suppliers to be ready for the testing procedure so scheduled by the Contractor.

Material or workmanship which does not meet the requirements of the contract documents shall be removed and replaced by the Contractor immediately and at the Contractor's expense. Subsequent inspection or testing of said material or workmanship shall be provided by the Owner. However, all costs associated with said subsequent inspection or testing shall be deducted from monies otherwise due the Contractor.

Inspection and testing by the Owner shall be in addition to all inspections or tests required of manufacturers or suppliers by the contract documents, applicable manufacturing standards, Federal, State or Local laws or by the Contractor for materials, equipment, or workmanship. Failure of the Owner to make any inspection or test shall not relieve the Contractor of his obligation to provide materials and workmanship or otherwise perform in accordance with the contract documents.

27 - Substantial Completion

At such time as the Contractor has completed the work and prior to requesting a final inspection, the Contractor shall make written request for an inspection for substantial completion. Such request shall be made no less than seven (7) calendar days prior to the requested date of inspection. An inspection will be made by

the Engineer and a determination will be made as to whether or not the work is, in fact, substantially complete and a "punch list" will be developed. "Punch Lists" containing numerous items or items which may effect the intended use of the work will be considered cause to delay issuance of a Certificate of Substantial Completion. Operation and Maintenance manuals shall be submitted and approved prior to issuance of any Certificate of Substantial Completion. The use of Substantial Completion will not be used, unless called for in Section 1600.

28 - Rights of Various Interests

Wherever work being done by the Owner's forces or by other Contractors is contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the Engineer to secure the completion of the various portions of the work in general harmony.

29 - Separate Contracts

The Owner reserves the right to let other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate the contractor=s work with theirs.

30 - Subcontractors

The Contractor shall notify the Engineer in writing of the names and addresses of all proposed Subcontractors for the work at the Preconstruction Meeting. Subcontractors will not be recognized as having a direct relationship with the Owner. The persons engaged in the work, including employees of subcontractors and suppliers, will be considered employees of the Contractor and their work shall be subject to the provisions of the contract. References in the contract documents to actions required of subcontractors, manufacturers, suppliers, or any person, other than the Contractor, the Owner, the Engineer or the Construction Inspector, shall be interpreted as requiring that the Contractor shall require such subcontractor, manufacturer, supplier or person to perform the specified action.

A subcontractor for any part of the work must have experience on similar work and, if required, furnish the owner with a list of projects and the Owners or Engineers who are familiar with their competence.

31 - Access

The Contractor shall maintain access to the property owners adjacent to the Project covered by the Contract.

32 - Construction Schedule and Procedures

The Contractor shall submit and continually update a time schedule for the work and a sequence of operations.

Before starting any work, and from time to time during its progress, as the Engineer may request, the Contractor shall outline to the Engineer the methods he plans to use in doing the work, and the various steps he intends to take. Failure of the Engineer to reject the methods or steps proposed by the Contractor shall not relieve the Contractor of his responsibility for the correct and timely performance of the work.

33 - Project Management

The Contractor shall schedule and coordinate the work of the Contractor and all subcontractors and others involved to maintain the accepted progress schedule. The Contractor's duties shall also include the planning of the work, the scheduling of ordering and delivery of materials, and checking and control of all work under this contract.

The Contractor shall be responsible for complete supervision and control of their subcontractors as though they were his own forces. Notice to the Contractor shall be considered notice to all affected subcontractors.

34 - Entry

The right of access to the work wherever it is in preparation or progress shall be extended to the Owner and representatives of appropriate regulatory agencies. The Contractor shall provide facilities for such access and inspection.

35 - Restoration

The Contractor shall conduct his operations so that restoration of roadways, driveways, curb and gutter, ditches and easements progresses with the work. If the Engineer determines that inadequate progress is being made with the restoration, he may shut-down the Contractor's operations until the restoration is caught up. Such a shut-down shall be considered required due to the failure of the Contractor to perform as described in this paragraph and therefore shall not constitute a time delay and/or unavoidable delay for the

Contractor. Any cost associated with such shut-down as described in this paragraph, including re-mobilization, shall be borne by the Contractor.

Any areas that are disturbed and work is subsequently suspended by the Contractor for a period of more than 24 hours shall be cleaned of debris and shall be graded so as to facilitate effective drainage. Street signs, mailboxes, fences, planters, etc. shall be restored within 24 hours of disturbance. The Contractor shall make inspections of all areas disturbed since the commencement of construction for the purpose of insuring restoration efforts have been effective. Such inspections shall be made daily and deficiencies shall be corrected within 24 hours.

In the event the restoration is not done, the Owner shall reserve the right to employ others to perform the restoration work. The Owner will back charge the Contractor for this service.

36 - Completion of "Punch List" Items

Prior to **completion** of the project, the Contractor shall request an inspection and any deficiencies found at that time will be noted on a "Punch List". The development of a "Punch List" shall not delay or terminate the accumulation or assessment of liquidated damages as established in Section 01500, Paragraph 86.

37 - Authority of Contractor

A. Contractor's Representative:

The Contractor shall notify the Owner in writing of the name of the person who will act as the Contractor's representative and shall have the authority to act in matters relating to this contract. This person shall have authority to carry out the provisions of the contract and to supply materials, equipment, tools and labor without delay for the performance of the work.

B. Construction Procedures:

The Contractor shall supervise and direct the work. He has the authority to determine the means, methods, techniques, sequences and procedures of construction, except in those instances where the Owner, to define the quality of an item of work, specifies in the contract a means, method, technique, sequence or procedure for the construction of that item of work.

38 - Authority of Engineer

The Project Engineer is the authorized representative of the Owner. All direction to the Contractor shall be provided only by the Project Engineer.

39 - Owner-Contractor Coordination

A. Service of Notice:

Notice, order, direction, request or other communication given by the Engineer to the Contractor shall be deemed to be well and sufficiently given to the Contractor if left at any office used by the Contractor or delivered to any of his offices, clerks or employees or posted at the site of any work or mailed to any post office addressed to the Contractor at the address given in the contract document or mailed to the Contractor's last known place of business. If mailed by first-class mail, any form of communication shall be deemed to have been given to and received by the Contractor two days after the day of mailing.

B. Suggestions to Contractor:

Plan or method of work suggested by the Engineer to the Contractor but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor. The Engineer assumes no responsibility therefore and in no way will be held liable for any defects in the work which may result from or be caused by the use of such plan or method of work.

C. Cooperation:

The Contractor agrees to permit entry to the site of the work by the Owner or other contractors performing work on behalf of the Owner. The Contractor shall afford the Owner, other subcontractors and their employees, reasonable facilities and cooperation and shall arrange his work and dispose of his materials in such a manner as to not interfere with the activities of the Owner or of others upon the site of the work. The Contractor shall promptly make good any injury or damage that may be sustained by other contractors or employees of the Owner at his hands. The Contractor shall join his work to that of others and perform his work in proper sequence in relation to that of others.

If requested by the Contractor, the Owner shall arrange meetings with other contractors performing work on behalf of the Owner to plan coordination of construction activities. The Owner shall keep the Contractor informed of the planned activities of other contractors.

Differences or conflicts arising between the Contractor and other contractors employed by the Owner or between the Contractor and the works of the Owner, with regard to their work, shall be submitted to the Engineer for his decision in the matter. If the work of the Contractor is affected or delayed because of any act or omission of other contractors or of the Owner, the Contractor may submit, for the Engineer's consideration, a documented request for a change order.

40 - Interpretation of Specifications and Drawings

A. General:

The specifications and drawings are intended to be explanatory of each other. Work specified on the drawings and not in the specifications, or vice versa, shall be executed as if specified in both.

B. Request for Clarification:

In the event the work to be done or matters relative thereto are not sufficiently detailed or explained in the contract documents, the Contractor shall apply to the Engineer for further explanations as may be necessary and shall conform thereto so far as may be consistent with the terms of the contract. In the event of doubt or question arising respecting the true meaning of the specifications or drawings, reference shall be made to the Engineer for his decision.

41 - Discrepancies in Specifications and Drawings

A. Errors and Omissions:

If the Contractor, in the course of the work, becomes aware of any claimed errors or omissions in the contract documents or in the Owner's field of work, he shall immediately inform the Engineer in writing. The Engineer shall promptly review the matter and if he finds an error or omission has been made, he shall determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the contract, the Engineer shall issue an appropriate change order. After discovery of an error or omission by the Contractor, related work performed by the Contractor shall be done at his risk unless authorized, in writing, by the Engineer.

B. Conflicting Provisions:

In cases of conflict between the specifications and drawings, the specifications shall govern. Figure dimensions on drawings

shall govern over scale dimensions and detail drawings shall govern over general drawings. In the event an item of work is described differently in two or more locations on the drawings and in the specifications, the Contractor shall request a clarification from the Engineer. For any event where the Contractor claims any ambiguities or discrepancies within the specifications, the Contractor may assume that the higher, greater and most stringent specification or standard applies.

42 - Material, Equipment and Workmanship

Unless otherwise specifically stated in the contract documents, the Contractor shall provide and pay for material, labor, tools, equipment, water, light, power, transportation, supervision, and temporary construction of any nature, and other services and facilities of any nature, whatsoever necessary, to execute, complete and deliver the work within the specified time. Material and equipment shall be new and of the quality specified. Equipment offered shall be current modifications which have been in successful regular operation under comparable conditions. Construction work shall be executed in conformity with the standard practice of the trade.

43 - Demonstration of Compliance with Contract Requirements

A. Inspection:

To demonstrate his compliance with the contract requirements, the Contractor shall assist the Engineer in his performance of inspection work. The Contractor shall grant the Engineer access to the work and to the site of the work, and to the places where work is being prepared, or whence materials, equipment or machinery are being obtained for the work. The Contractor shall provide information requested by the Engineer in connection with inspection work.

If the contract documents, laws, ordinances, or any public regulatory authority require parts of the work to be specially inspected, tested or approved, the Contractor shall give the Engineer adequate prior written notice of the availability of the subject work for examination.

If parts of the work are covered in contravention of the Engineer's directive, the cost of exposing the work for inspection and closing shall be borne by the Contractor regardless of whether or not the work is found to be in compliance with the contract.

If any work is covered in the absence of the Engineer's directive to the contrary, the Contractor shall, if directed by the

Engineer, uncover, expose or otherwise make available for inspection, portions of covered work. If it is found that such work is defective, the Contractor shall bear the expense of uncovering and reconstructing. If the work is found to be in compliance with the contract, the Contractor will be allowed an increase in the contract price or an extension in the contract time, or both via a change order.

B. Certification:

In cases where compliance of materials or equipment to contract requirements is not readily determinable through inspection and tests, the Engineer shall request that the Contractor provide properly authenticated documents, certificates or other satisfactory proof of compliance. These documents, certifications and proofs shall include performance characteristics, materials of construction and the physical or chemical characteristics of materials.

C. Inspection at Point of Manufacturing:

If inspection and testing of materials or equipment in the vicinity of the work by the Owner is not practical, the specifications may require that such inspection and testing or witnessing of tests take place at the point of manufacture. In this case and in the event the remote inspection and testing is not specified and is requested by the Owner, the required travel, subsistence, and labor expenses shall be paid by the Owner. If the Contractor requests the Owner to inspect and test material or equipment at the point of manufacture, then the additional costs to the Owner for travel, subsistence, and labor expenses shall be paid by the Contractor.

44 - Project Meetings

1.0 General

Project meetings will be held on site as often as deemed necessary by the Engineer throughout the construction period. Meetings will normally be held monthly. Contractor's representatives shall attend.

The purpose of the meetings will be to discuss schedule, progress, coordination, submittals and job-related problems.

45 - Overtime and Shift Work

Overtime and shift work may be established as a regular procedure by the Contractor with reasonable notice and written permission of the Owner. No work other than overtime and shift work

established as a regular procedure shall be performed between the hours of 6:00 p.m. and 7:00 a.m. nor on Sundays or holidays except such work as is necessary for the proper care and protection of the work already performed or in case of an emergency.

Contractor agrees to pay the Owner's costs of overtime inspection except those occurring as a result of overtime and shift work established as a regular procedure. Overtime inspection shall include inspection required during holidays and weekends, and between the hours of 6:00 p.m. and 7:00 a.m. on weekdays. Costs of overtime inspection will cover engineering, inspection, general supervision and overhead expenses which are directly chargeable to the overtime work. Contractor agrees that Owner shall deduct such charges from payments due the Contractor.

46 - Construction Schedule

1.0 Scope:

This section specifies reports and schedules for planning and monitoring the progress of the work.

2.0 Description:

The Contractor shall provide a graphic construction schedule (bar chart) indicating various subdivisions of the work with no task exceeding ____ days in duration and the dates of commencing and finishing each. All items shall correspond to the items shown on the schedule of values as required in Section 01500, Paragraph 75. The schedule will also show major equipment submittals and review time. The schedule shall show the time allowed for testing and for other procedures which must be completed prior to the work being put into operation. The schedule will take into account the time of completion and work sequence. The Contractor shall also provide a listing of start and stop dates and durations of all activities listed in the schedule.

3.0 Submittal Procedures:

Within ten (10) days after Notice of Award of the Bid, the Contractor shall submit six(6)copies of the construction schedule to the City Project Engineer.

Within fourteen (14) calendar days after receipt of the submittal, the City Project Engineer shall review the submitted schedule and return two copies with comments to the Contractor. If the City Project Engineer finds that the submitted schedule does not comply with specified requirements, the corrective revisions will be noted on the submittal copy returned to the Contractor.

4.0 Schedule Revisions:

Revisions to the accepted construction schedule may be made only with the written approval of the Contractor and Owner. A change affecting the contract value of any activity, the completion time, and sequencing shall be made in accordance with applicable provisions of Section 01500, Paragraph 82.

5.0 Project Status Update:

Project status, review and update shall be provided with each pay request and at least monthly as specified in Section 01500, Paragraph 79.

47 - Quality

Where the contract requires that materials or equipment be provided or that construction work be performed, and detailed specifications of such materials, equipment or construction work are not set forth, the Contractor shall perform the work using materials and equipment of the best grade in quality and workmanship obtainable in the market from firms of established good reputations, and shall follow standard practices in the performance of construction work. The work performed shall be in conformity and harmony with the intent to secure the standard of construction and equipment of work as a whole and in part.

48 - Material and Equipment Specified By Name

A. GENERAL

When material or equipment is specified by reference to two or more patents, brand names, or catalog numbers followed by "or equal," it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other materials or equipment, of equal capacities, quality and function shall be considered by the Owner upon the Contractor's request for substitution. Requests for substitution shall be made in accordance with Section 01500, Paragraph 50.

B. SINGLE SOURCE PRODUCTS:

If material or equipment is specified by one or more patents or proprietary names or by the name of only one manufacturer not followed by "or equal," substitutions will not be considered.

49 - Submittal Procedure

1.0 General

The Contractor shall submit descriptive information which will enable the Engineer to determine whether the Contractor's proposed materials, equipment, or methods of work are in general conformance to the design concept and in compliance with the drawings and specifications.

2.0 Contractor's Responsibilities

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment, or method of work shall be as described in the submittal. The Contractor shall verify in writing that all features of all products conform to the requirements of the specifications and drawings. Submittal documents shall be clearly edited to indicate only those items, models, or series of material or equipment which are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall insure that there is no conflict with other submittals and shall notify the Engineer in each case where his submittal may affect the work of another contractor or the Owner. The Contractor shall insure coordination of submittals among the related crafts and subcontractors.

The contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer with regard to a submittal. These dealings shall be limited to contract interpretations.

3.0 Transmittal Procedure

A. General

Submittals regarding material and equipment shall be accompanied by the Submittal Transmittal Form. A separate form shall be used for each specific item, class of material, or piece of equipment. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers and specification section and paragraph. Submittals for various items shall be made with a single form when the items taken together constitute a manufacture's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.

A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where

"XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXXY"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B, or C being the first, second, and third resubmittals, respectively. Submittal 026B, for example, is the second resubmittal of submittal 026.

B. Deviation from the Contract

If the Contractor proposes to provide material, equipment, or method of work which deviates from the project manual, he shall indicate so under "deviations" on the transmittal form accompanying the submittal copies.

C. Submittal Completeness

Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

4.0 Review Procedure

Review shall not extend to means, methods, techniques, sequences, or procedures of construction, or to verifying quantities, dimensions, weights or gages, or fabrication processes, or to safety precautions, or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.

The Contractor shall submit six copies of all specified information. Unless otherwise specified, within 30 calendar days after receipt of the submittal, the Engineer shall review the submittal and return one copy of the submittal with comments. The returned submittal shall indicate one of the following actions:

1. If the review indicates conformance with the drawings and specifications, submittal copies will be marked "NO EXCEPTIONS TAKEN". In this event, the Contractor may begin to implement the work or incorporate the material or equipment covered by the submittal.

2. If the review indicates limited corrections are required, submittal copies will be marked "MAKE CORRECTIONS NOTED". The Contractor may begin implementing the work or incorporate the materials or equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a corrected copy shall be provided.

3. If the review indicates that the submittal is insufficient or contains incorrect data, submittal copies will be marked "AMEND AND RESUBMIT". Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTION TAKEN" or "MAKE CORRECTIONS NOTED".

4. If the review indicates that the submittal does not comply with the plans and specifications, submittal copies will be marked "REJECTED - SEE REMARKS". Submittals with deviations which have not been clearly identified will be rejected. Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED".

5.0 Effect of Review of Contractor's Submittals

Review of drawings, methods of work, or information regarding materials or equipment the Contractor proposed to provide, shall not relieve the Contractor of his responsibility for errors and omissions therein and shall not be regarded as an assumption of risks or liability by the Owner or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, or the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTION TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the Owner has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

50 - Requests for Substitution

The Contractor may offer material or equipment of equal or better quality and performance in substitution for those specified as described in Section 01500, Paragraph 48. The Owner will consider offers for substitution only from the Contractor and will not acknowledge or consider such offers from suppliers, distributors, manufacturers, or subcontractors. The Contractor's offers of substitution shall be made in writing to the Engineer and shall include sufficient data to enable the Engineer to assess the acceptability of the material or equipment for the particular application and requirements.

If the offered substitution necessitates changes to or coordination with other portions of the work, the data submitted shall include drawings and details showing such changes. Contractor agrees to perform these changes as part of the substitution of material or equipment at no additional cost to the Owner. Within thirty (30) calendar days after receipt of the offer of

substitution, the Engineer will review the material submitted by the Contractor and advise the Contractor of objections, if any, to the proposed substitution. Such action shall not relieve the Contractor from responsibility for the efficiency, sufficiency, quality and performance of the substitute material or equipment, in the same manner and degree as the material and equipment specified by name. Any cost differential associated with a substitution shall be reflected in the offer and the contract documents shall be modified by a change order.

51 - Manufacturer's Directions

Manufactured articles, material and equipment shall be applied, installed, connected, erected, adjusted, tested, operated and maintained as recommended by the manufacturer, unless otherwise specified. Manufacturer's installation instructions and procedures shall be provided prior to installation of the manufactured articles, material and equipment.

52 - Product Data

Data required by the Owner for inspecting, testing, operating or maintaining parts of the work shall be provided by the Contractor. Unless otherwise specified, such information shall consist of six (6) copies and shall be provided at the time the referenced material or equipment is delivered to the job site. The data shall include such items as shop drawings, erection drawings, reinforcing steel schedules, testing and adjusting instructions, operations manuals, maintenance procedures, parts lists and record drawings. When applicable, information and data to be provided shall be identified by the specified equipment number. Extraneous material on the pages or drawings provided shall be crossed out, and the equipment or material to be supplied shall be clearly marked. Such information is to be provided as part of the work under this contract and its acceptability determined under normal material submittal procedures. The certificate of substantial completion shall not be issued for any portion of the work for which complete product data has not been submitted and approved.

53 - Operation and Maintenance Information

Six (6) complete sets of operation and maintenance information shall be provided for all mechanical and electrical equipment. Such operating and maintenance information shall consist of the name and address of the manufacturer, the nearest representative of the manufacturer, and the nearest supplier of the manufacturer's equipment and parts. In addition, the following items of information shall be provided where applicable.

1. Lubrication Information: This shall consist of the manufacturer's recommendations regarding the lubricants to be used and the lubrication schedule to be followed.
2. Control Diagrams: Diagrams shall show internal and connection wiring.
3. Start-up Procedures: These instructions consist of the equipment manufacturer's recommendations for installation, adjustment, calibration, and troubleshooting.
4. Operating Procedures: These instructions consist of the equipment manufacturer's recommended step-by-step procedures for starting, operating, and stopping the equipment under specified modes of operation.
5. Preventive Maintenance Procedures: These instructions consist of the equipment manufacturer's recommended steps and schedules for maintaining the equipment.
6. Overhaul Instructions: These instructions consist of the manufacturer's directions for the disassembly, repair and reassembly of the equipment and any safety precautions that must be observed while performing the work.
7. Parts List: This list consists of the generic title and identification number of each component part of the equipment.
8. Spare Parts List: This list consists of the manufacturer's recommendations of numbers of parts which should be stored by the Owner and any special storage precautions which may be required.
9. Original warranties as required by the contract documents and as supplied by the manufacturer.

54 - Record Drawings

It shall be the primary responsibility of the Project Consulting Engineer to gather and prepare detailed information in the field for preparation of record drawings on a monthly basis prior to the Owner approving payments to the Contractor. However, the Contractor shall maintain a neat set of updated construction drawings and note on these drawings in color any revisions, including any descriptive notes relative to these revisions, and the location of water and sewer laterals. These plans shall be available during normal working hours at the job site for review by the City's/consultant's project inspector, and at the completion of

the project shall become the property of the Owner and shall be delivered to the City's Project Engineer. Failure to do so will result in monies being withheld from the Contractor's final payment.

55 - Protection of the Public and Property

The Contractor shall provide and maintain all necessary watchmen, barricades, lights, flagmen and warning signs and take all necessary precautions for the protection of the public. The Contractor shall provide a plan at the Pre-construction meeting

56 - Protection of the Owner's Property

The Contractor shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the Owner's property from injury or loss arising in connection with this Contract. The Contractor shall adequately protect adjacent private and public property, as provided by Law and Contract Documents.

Before parking any heavy equipment on property of the City of Savannah, the Contractor must request and receive permission from the Owner.

57 - Maintenance of Traffic and Sequence of Operations:

A. General: The following conditions will apply:

1. A traffic control plan shall be submitted for approval by the City Traffic Engineering Director, hereinafter referred to in this section as the Traffic Engineer, prior to any construction operations. Furthermore, a right-of-way permit must be obtained from the Traffic Engineering Department.
2. All signage for construction operations, lane and street closures, as well as detours, shall be performed in accordance with the current Federal and State Manual on Uniform Traffic Control Devices as well as the current revision of the City of Savannah Traffic Engineering Manual on Traffic Controls and Temporary Street Construction and Maintenance.
3. The work shall be arranged and conducted so that it can be performed with the least interference to all vehicular and pedestrian traffic.

4. No property owner shall be denied vehicular access to their property for any length of time, other than that as determined by the Traffic Engineer, is absolutely necessary.
5. Two-way traffic must be maintained on all public roads and streets, except that during periods of off-peak use, one-way traffic, properly controlled by a certified DOT flagman, will be permitted at the discretion of the Engineer. Each time there is to be a change in the number of lanes open to traffic; it shall be approved by the Engineer.
6. The Traffic Engineer may approve detours around construction sites when one open traffic lane is not feasible.
7. For closing of minor residential streets, a 24 hour advance notice is required.
8. For lane closures involving signalized intersections or arterial streets, a 48 hour advance notice is required.
9. Complete street closures involving collectors and arterial streets, requiring a traffic detour, require 4 working days advance notice in order to coordinate a news release.
10. Construction is not to be permitted on City streets between the hours of 10:00 P.M. through 6:00 A.M., except under emergency situations with the approval of the Traffic Engineer.
11. In order to provide the greatest possible convenience to the public, the contractor shall remove all lane closure markings and devices immediately when work is complete or temporarily suspended for any length of time.

B. Safety

1. The contractor performing the work shall be responsible for the erection and maintenance of all traffic control devices during construction.
2. At the end of work each day, the contractor shall remove all equipment, tools, and any other hazards in the traveled portion of the roadway.

3. When construction necessitates suspension of an existing traffic signal operation, the contractor shall furnish, at his expense, an off-duty police officer to regulate and maintain traffic control at the site.

C. Enforcement

In the event that compliance with these measures is not achieved, the Engineer may shut down all operations being performed. The Traffic Engineer shall also withhold any payments due until the above requirements have been met. At any time during the course of the work, the Traffic Engineer may, at his discretion and by whatever means necessary, correct any situation that he deems hazardous to the health and welfare of the public. Work performed by the Traffic Engineer, or any entity enlisted by the Traffic Engineer, to correct situations of public hazard shall be deducted from monies due the Contractor.

D. Compensation

There will be no separate pay item for maintenance of traffic or for coordination of the Sequence of Operations.

58 - Lot Corners

In the course of the construction work, it may be necessary to disturb and remove the established lot or property corners of some of the properties. The Contractor shall be required to record all property corners and replace them after the construction is completed. All lot or property corners removed as described above, or all lot or property corners destroyed by the Contractor's operations, shall be replaced at the expense of the Contractor by a Land Surveyor registered in the State of Georgia. The Contractor shall provide certification from the Land Surveyor for all reset property corners.

59 - Existing Utilities

All known utility facilities are shown schematically on the plans and are not necessarily accurate in location as to plan or elevation. Utilities such as service lines or unknown facilities not shown on the plans will not relieve the Contractor of his responsibility under this requirement. The Contractor shall be responsible for the cost of repairs to any damaged underground facilities; even when such facilities are not shown on the plans. The Contractor shall contact all utility companies prior to beginning work and request an accurate location of their respective utilities. "Existing Utility Facilities" shall mean any utility that exists on the project in its original, relocated or newly installed position.

The Contractor shall call, by law, the Utility Location and Coordination Council in Atlanta at 1-800-282-7411 and shall request that all owners of utilities, including gas companies, electric companies, telephone companies, cable television companies and governmental units, prior to starting any excavation of the project, locate and mark their respective facilities.

All Contractor's operations shall be conducted so as to interfere as little as possible with utility service. Any proposed interruption by the Contractor must be approved in advance by the respective utility's owner.

The existence and location of underground utilities will be investigated and verified in the field by the Contractor before starting work. The location of all known interferences based on the best information available has been shown on the drawings, but this information may not be complete or accurate.

Water lines and gas lines and appurtenances and sewer lines uncovered by the Contractor shall be protected and kept in service by the Contractor and the Contractor shall notify the respective utility's owner that the line has been or will be uncovered. The Contractor shall use adequate braces and slings or other appropriate methods to keep the lines in service, and any repairs made necessary by his operation shall be made at the Contractor's expense.

The Contractor shall familiarize himself with and comply with the provisions of O.C.G.A. Section 25-9-1 et. seq.

If any public or private utility lines, pipes, facilities, or structures are damaged or broken by the operations of the Contractor as a result of being disturbed, exposed or unsupported, the Contractor shall be responsible for the complete and prompt restoration of the same and shall hold the City harmless from any claims or causes or action for damage and for any liability which may arise therefrom.

The Contractor is responsible for coordinating with the respective utility's owner any relocation, adjustment, holding or replacement of utility facilities.

Power poles to be relocated shall be moved by the Savannah Electric and Power Company. Telephone poles will be moved by Southern Bell. Gas lines to be relocated or lowered will be moved by the Savannah Gas Company. The relocation, holding or replacement of any existing utilities shall be considered consequential to the work and any cost associated therewith shall be borne by the Contractor.

60 - Special Protection of Trees

The Contractor shall comply with the City Tree Ordinance. Refer to Section 02100, AClearing and Tree Protection,@ for procedures and requirements.

61 - Material Delivery, Handling, and Storage

The Contractor shall schedule and sequence the delivery of material and equipment such that installation can be accomplished in a timely manner. The Contractor shall thoroughly examine all material and equipment upon delivery and shall not accept delivery of defective or damaged material or equipment.

Nylon slings and chokers shall be used for lifting all material and equipment. Chains, cables, wire rope, or other such items that may cause

change to factory applied coatings shall not be used for handling of material or equipment.

Material and equipment shall be stored as compactly and neatly as practicable at points convenient for the Contractor and which do not damage the work or interfere with or are otherwise hazardous to traffic. Material and equipment shall be stored so as to facilitate inspection and to insure preservation of their quality and fitness for use. All material and equipment shall be stored on wooden skids or platforms such as not to be in direct contact with the ground. All mechanical and electrical equipment shall be stored and covered in a manner such as to completely be protected from dust and moisture. Prior to the delivery of any materials or equipment the Contractor shall submit, for the Engineers approval, a plan showing all designated storage and assembly areas. Should the Contractor choose to store material or equipment or use for assembly property which is not owned by the City of Savannah or the Contractor, a letter of permission signed by the legal owner of the property shall be obtained by the Contractor and submitted to the Engineer a minimum of 24 hours prior to delivery. All material and equipment stored at any facility other than the site shall be tagged with the Owner=s name and the project number. Payment shall not be made for "Stored Materials" for any material stored at locations or in any manner not suitable to the Owner.

62 - Maintenance During Construction

The Contractor shall maintain the work from the beginning of construction operations until final acceptance of the Project. This maintenance shall constitute continuous and effective work prosecuted day by day with adequate equipment and forces to the end that roadways or structures are kept in satisfactory condition at

all times, including satisfactory signing or marking as appropriate, and control of traffic where required by use of traffic control devices as required by the State of Georgia.

Upon completion of the work, the Contractor shall remove all construction signs and barricades before final acceptance of the Project.

63 - Emergencies

In an emergency affecting the safety of life or of the work or of adjoining property, the Contractor is, without special instructions or authorization from the Owner, hereby permitted to act at his discretion to prevent such threatening loss or injury. He shall also act, without appeal, if so authorized or instructed by the Owner. The Contractor shall supply the Engineer with two (2) emergency phone numbers for contact 24 hours per day in the event of an emergency. After attempting contact with the Contractor via the emergency phone numbers, the Contractor cannot be reached or should fail to respond, the Owner may remedy the situation by whatever means as may be necessary and deduct the cost for same from any monies due the Contractor.

64 - Compensation

Any compensation claimed by the Contractor due to emergency work shall be determined by force account.

65 - Safety and Health

The Contractor shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from Labor Building, 14th and Constitution Avenue N.W., Washington, D.C. 20013.

The Contractor shall also comply with the provisions of the Federal Occupational Safety and Health Act as amended and the High Voltage Act of the State of Georgia, O.C.G.A. Section 46-3-30 through 46-3-40, and all federal, state, county, and city codes, regulations, and standards.

66 - Accidents

The Contractor shall provide at the site such equipment and medical facilities as are necessary to supply first-aid service to anyone who may be injured in connection with the work. The Contractor shall report in writing to the Owner all accidents whatsoever arising out of, or in connection with, the performance

of the work, whether on or adjacent to the site, which causes death, personal injury, or property damages, giving full details and statement of witnesses. In addition, if death or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the Contractor or any subcontractor an account of any accident, the Contractor shall promptly report the facts to the Owner, giving full details in writing of the claim.

The Contractor shall provide his Superintendent and Foreman, who are on the site of the work, the name of the hospital and telephone number and the name and phone number of the doctor he proposes to use in case of accident.

67 - Load Limits

The Contractor shall be governed by the local load limit requirements of the Georgia Standard Specifications on State, County or City maintained roadways. The Contractor shall be responsible for his damage to existing streets and roads.

68 - Sanitary Provisions

The Contractor shall provide temporary sanitary facilities for the use of the workmen during the progress of the work. The sanitary facilities shall conform to the requirements of the Federal Occupational Safety and Health Administration. All facilities shall be removed at the completion of the Contract.

69 - Construction Buildings

Should the Contractor desire, he may erect structures for housing tools, machinery and supplies; structures will be permitted only at places approved by the Owner. Their surroundings shall be maintained at all times in a sanitary and satisfactory manner. On or before the completion of the work, all such structures shall be removed, together with all rubbish and trash, and the site shall be restored to its original condition at the expense of the Contractor. Structures will not be permitted for the housing of men.

70 - Cleaning Up

The Contractor shall, as directed by the Owner, remove at his own expense from the Owner's property and from all public and private property all temporary structures, rubbish and waste materials resulting from his operations. Clean-up shall be concurrent with the work. Where complete restoration is not reasonable until testing or inspection is complete, the Contractor shall, at minimum, remove all debris and trash and perform grading

such that the area is left neat and without depressions that may hold water. The sufficiency of temporary clean-up shall be at the discretion of the Engineer.

71 - Electrical Energy

The Contractor shall make all necessary applications and arrangements and pay all fees and charges for electrical energy for power and light required for the proper completion of this contract during its entire progress. The Contractor shall provide all temporary wiring, switches, connections and meters.

There shall be sufficient artificial light, by means of electricity, so that all work may be done in a workmanlike manner when there is not sufficient daylight.

The Contractor shall remove all temporary electrical service and appurtenances prior to final acceptance by the Owner. Where permanent electrical service is required, the Contractor shall request, in writing, an inspection of the electrical components of the work. Such request for inspection shall be given a minimum of 48 hours in advance. At such time as the electrical components of the work have been inspected and approved, the Contractor shall request from the Owner, in writing, an electrical service. Such request for electrical service shall be given a minimum of ten (10) days in advance.

72 - Water Supply

The Contractor shall provide all water required to successfully perform the work. All water provided by the Contractor which is not potable shall be clearly marked as such. All water from fire hydrants, post hydrants, or otherwise from the existing distribution system of the City of Savannah shall be metered with a meter supplied by the City of Savannah Water Department and shall be obtained only with written authorization of the Owner. The Contractor shall be required to pay all costs associated with meters or back flow prevention devices.

73 - Environmental Impact

The Contractor shall conduct his operations so as to minimize, to the greatest extent possible, adverse environmental impact.

A. Noise. All equipment and machinery shall be provided with exhaust mufflers maintained in good working order so as to reduce operating noise to minimum levels. In addition, operation of equipment and machinery shall be limited to daylight hours, except with the permission of the Owner, based on critical need for the operation.

B. Dust/Smoke. All equipment movements shall be accompanied by a minimum of dust. Traveled surfaces and earthwork shall be maintained in a moist condition to avoid the generation of dust or the airborne movement of particulate matter under all prevailing atmospheric conditions.

Burning operations shall be conducted only with the Owner's written permission. The Contractor shall be responsible for obtaining all permits and complying with all codes, ordinances and regulations pertaining to the burning.

C. Traffic. Trucks carrying spoil, fill, concrete or other materials shall be routed over roads which will result in the least effect on traffic and nuisance to the public. All material shall be loaded in a manner which will preclude the loss of any portion of the load in transit, including covering, if necessary.

D. Siltation. All points of concentrated runoff from rainfall shall be visually monitored to determine that no eroded material leaves the construction site. Measures shall be taken to promptly eliminate offsite deposition of eroded material, including the installation of silt fencing and detention basins.

74 - Monthly Payments

This section is to control payments and is entered into instead of the Georgia prompt payment act OCGA 13-11-1. Not later than the fifth day of every month the Contractor shall prepare and submit a Request for Periodic Payment, along with an Affidavit of Payment of Claims, covering the total quantities under each item of work that has been completed from the start of the job up to and including the last day of the preceding month, and the value of the work so completed determined in accordance with the schedule of values for such items together with such supporting evidence as may be required by the Engineer. This estimate may also include an allowance for the cost of such materials and equipment required in the permanent work as has been delivered to the site or stored in an approved location and suitably protected but not as yet incorporated in the work. Under no circumstances shall any material or equipment, for which payment has been made by the owner to the Contractor, be sold, returned to the supplier or otherwise moved from storage except for incorporation into the work as covered in this contract without written authorization from the Owner.

Not later than the 30th day after submitting an accepted, approved and correct estimate along with all required documentation (as per these contract documents) as detailed in the above paragraph, the Owner shall, after deducting previous payments made, pay to the Contractor 90% of the amount of the estimate as approved

by the Owner, as long as the gross value of completed work is less than 50% of the total Contract amount, or if the Contractor is not maintaining his construction schedule to the satisfaction of the Owner, the Owner shall retain 10% of the gross value of the completed work as indicated by the current approved estimate. After the gross value of completed work becomes equal to 50% of the total Contract amount within a time period satisfactory to the Owner, then the Owner will continue to retain the 10% of the first 50% of the work but will not require any additional retainage; provided, however, that if work is unsatisfactory or falls behind schedule, retention may be resumed at the previous level after notification to the Contractor.

The Contractor shall also submit with each Request for Periodic Payment a progress report (Section 01430-1). Failure to submit said form shall be grounds for the Owner to withhold payment.

The City has a right to hold a payment to a Contractor who has not included an updated progress report with his pay request.

Retention of contractual payments and the creation of escrow accounts for contracts for the installation, improvement, maintenance or repair of water or sewer facilities shall be in accordance with the **Georgia Retainage Law, Section 13-10-20, Article 2, as found in O.C.G.A.**

Before final payment is due, the Contractor shall submit evidence satisfactory to the Engineer that all payrolls, material bills, and other indebtedness connected with the work have been paid, except that in case of disputed indebtedness or liens, the Contractor may submit in lieu of evidence of payment an additional Surety Bond satisfactory to the Owner guaranteeing payment of all such disputed amounts when adjudicated.

Special Payment Provision: For a Contractor where payment bonds have been waived, all Requests for Periodic Payment forms submitted by the Contractor shall be accompanied by payment affidavits from each subcontractor/supplier for the services/materials claimed before payment will be released by the Owner. Application for final payment shall also be accompanied by a lien waiver from each (sub)contractor/supplier who furnished labor or materials for the job.

75 - Measurement and Payment

Measurement and payment shall be made for the units or lump sum contract prices shown on the Bid Schedule. Direct payment shall only be made for those items of work specifically listed in

the proposal and the cost of other work must be included in the contract price for the applicable item to which it relates.

Within ten (10) days of issuance of the Notice of Award, on lump sum contracts, the Contractor shall provide, for review and approval, a schedule of values for the various subdivisions of the work. No item shall have a value greater than \$ N/A. The schedule of values shall be submitted on the Request for Periodic Payment Form (Section 1420). All items shall correspond to the items shown on the construction schedule as required in Section 01500, Paragraph 45.

76 - Use of Completed Portions

The Owner may, at any time during progress of the work, after written notice to the Contractor, take over and place in service any completed portions of the work which are ready for service, although the entire work of the Contract is not fully completed, and notwithstanding the time for completion of the entire work or such portions which may not be expired. In such case, the Owner may issue certificates of substantial completion for such portions of the work as defined in Section 1600 (if appropriate), but such taking possession thereof shall not be deemed an acceptance of any other portions of the work, nor of any uncompleted portions, nor of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the Contractor shall be entitled to such extra compensation, or extension of time, or both, as determined by the Owner. The warranty period will be as defined in Section 1500, Paragraph 56. There will be no issue of Substantial Completion, unless defined in Section 1600.

77 - Beneficial Use:

During the execution of the work certain portions of the work may be directly or indirectly placed in service. However, "beneficial use" shall not be claimed by the Contractor as a means to force acceptance or completion. It shall be the responsibility of the Contractor to request, in writing to the Owner, an inspection to determine acceptance on all or any portion of the work. It shall be the responsibility of the Contractor to consider the amount of time any particular portion of this job may be used prior to Final Acceptance and bid the job accordingly.

78 - Payments Withheld Prior to Final Acceptance:

The Owner may withhold or, in the event of subsequently discovered evidence, nullify the whole or part of any certificate of payments to such extent as may be necessary to protect himself from loss on account of:

- (a) Defective work not remedied.
- (b) Claims filed or reasonable evidence indicating proposed public filing of claims by other parties against the Contractor.
- (c) Failure of the Contractor to make payments properly to Subcontractors or for material or labor.
- (d) Damage to another Contractor.

When the above grounds are removed or the Contractor provides a Surety Bond, satisfactory to the Owner, which will protect the Owner in the amount withheld, payment shall be made for amounts withheld because of them.

79 - Contract Time:

A. General

Time shall be of the essence of the contract. The Contractor shall promptly start the work after the date of the notice to proceed and shall prosecute the work so that portions of the project shall be complete within the times specified in Section 01500, Paragraph 46. During periods when weather or other conditions are unfavorable for construction, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work, where acceptable quality or efficiency will be affected by unfavorable conditions, shall be constructed while those conditions exist. It is expressly understood and agreed by and between the Contractor and the Owner that the contract time for completion of the work described herein is a reasonable time taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

B. Construction Schedule:

The Contractor shall provide a construction schedule and reports as specified in Section 01500, Paragraph 46 for scheduling and coordinating the work within the contract time. Contract time extensions shall be incorporated into updated schedules, reflecting their effect at the time of occurrence. Failure of the Contractor to comply with these requirements

for submittal of the construction schedule and reports shall be cause for delay in review of progress payments by the Owner.

C. Construction Progress:

The Contractor shall furnish such manpower, materials, facilities and equipment as may be necessary to insure the prosecution and completion of the work in accordance with the accepted schedule. If work falls fourteen (14) days or more behind the accepted construction schedule, the Contractor agrees that he will take some or all of the following actions to return the project to the accepted schedule. These actions may include the following:

1. Increase manpower in quantities and crafts.
2. Increase the number of working hours per shift, shifts per working day, working days per week, or the amount of equipment, or any combination of the foregoing.
3. Reschedule activities.

If requested by the Engineer, the Contractor shall prepare a proposed schedule revision demonstrating a plan to make up the lag in progress and insure completion of the work within the contract time. The proposed revision shall be submitted to the Engineer in accordance with Section 01500, Paragraph 46. Upon receipt of an acceptable proposed schedule, the revision to the construction schedule shall be made in accordance with Section 01500, Paragraph 22. All actions to return the project to the acceptable schedule are at the Contractor's expense.

The Contractor shall pay all costs incurred by the Owner which result from the Contractor's action to return the project to its accepted schedule. The Contractor agrees that the Owner shall deduct such charges from payments due the Contractor. It is further understood and agreed that none of the services performed by the Engineer in monitoring, reviewing and reporting project status and progress shall relieve the Contractor of responsibility for planning and managing construction work in conformance with the construction schedule.

D. Delays:

1. Notice of Delays: When the Contractor foresees a delay in the prosecution of the work and, in any event, immediately upon the occurrence of a delay which the Contractor regards as unavoidable, he shall notify the Engineer in writing of the probability of the occurrence of such delay, the extent of the delay, and its possible cause. The Contractor shall utilize that which is set forth herein (Section 01440-1) in reporting such delay. The Contractor shall take immediate steps to prevent, if possible, the occurrence or continuance of the delay. If this cannot be done, the Engineer shall determine how long the delay shall continue and to what extent the

prosecution and completion of the work are being delayed thereby. He shall also determine whether the delay is to be considered avoidable or unavoidable and shall notify the Contractor of his determination. The Contractor agrees that no claim shall be made for delays which are not called to the attention of the Engineer at the time of their occurrence.

2. **Avoidable Delays:** Avoidable delays in the prosecution of the work shall include delays which could have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or his subcontractors. Avoidable delays include:

- a. Delays which may in themselves be unavoidable but which affect only a portion of the work and do not necessarily prevent or delay the prosecution of other parts of the work or the completion of the whole work within the contract time.

- b. Time associated with the reasonable interference of other contractors employed by the Owner which do not necessarily prevent the completion of the whole work within the contract time.

3. **Unavoidable Delays:** Unavoidable delays in the prosecution or completion of the work shall include delays which result from causes beyond the control of the Contractor and which could not have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or his subcontractors. Delays in completion of the work of other contractors employed by the Owner will be considered unavoidable delays insofar as they interfere with the Contractor's completion of the work. Delays due to normal weather conditions shall not be regarded as unavoidable as the Contractor agrees to plan his work with prudent allowances for interference by normal weather conditions. Delays caused by acts of God, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes and freight embargoes shall be considered as unavoidable delays insofar as they prevent the Contractor from proceeding with at least 75 percent of the normal labor and equipment force for at least five hours per day toward completion of the current controlling items on the accepted construction schedule.

Should abnormal conditions prevent the work from beginning at the usual starting time, or prevent the Contractor from proceeding with 75 percent of the normal labor and equipment force for a period of at least five (5) hours per day, and the crew is dismissed as a result thereof, he will not be charged for the working day whether or not conditions change so that

the major portion of the day could be considered to be suitable for work on the controlling item.

E. Extension of Time:

1. Avoidable Delays: In case the work is not completed in the time specified, including extensions of time as may have been granted for unavoidable delays, the Contractor will be assessed liquidated damages, as specified in Section 01500, Paragraph 86.

The Owner may grant an extension of time for avoidable delay if he deems it in his best interest. If the Owner grants an extension of time for avoidable delay, the Contractor agrees to pay the liquidated damages.

2. Unavoidable Delays: For delays which the Contractor considers to be unavoidable, he shall submit to the Engineer complete information demonstrating the effect of the delay on the controlling operation in his construction schedule. The submission shall be made within thirty (30) calendar days of the occurrence which is claimed to be responsible for the unavoidable delay. The Engineer shall review the Contractor's submission and determine the number of days of unavoidable delay and the effect of such unavoidable delay on controlling operations of the work. The Owner agrees to grant an extension of time to the extent that unavoidable delay affects controlling operations in the construction schedule. During such extension of time, neither extra compensation or engineering inspection and administration nor damages for delay will be charged by the Contractor to the Owner. It is understood and agreed by the Contractor and Owner that time extensions due to unavoidable delays will be granted only if such unavoidable delays involve controlling operations which would prevent completion of the whole work within the specified contract time. It is understood and agreed by the Contractor and Owner that during such extension of time, no extra compensation shall be paid to the Contractor.
3. DAMAGES FOR DELAYS: For the period of time that any portion of the work remains unfinished after the time fixed for completion in the contract documents, as modified by extensions of time granted by the Owner, it is understood and agreed by the Contractor and the Owner that the Contractor shall pay the Owner the liquidated damages, specified in section 01500, Paragraph 86.

80 - Omissions

The drawings and specifications shall both be considered as a part of the contract. Any work and material shown in the one and omitted in the other, or described in the one and not in the other, or which may fairly be implied by both or either, shall be furnished and performed as though shown in both, in order to give a complete and first class job.

81 - Differing Site Conditions

- a. The Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing of: (1) subsurface or latent physical conditions differing materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Engineer shall promptly investigate the conditions, and, if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performances of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.
- b. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the required notice.
- c. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

82 - Changes in Work

The Owner, without invalidating the Contract, may order additions to or deductions from the work. The Contractor shall proceed with the work, as changed and the value of any such extra work or change shall be determined as provided in the Agreement, and the contract sum adjusted accordingly. Any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

In giving instructions, the Engineer shall have authority to make minor changes in the work which does not involve extra cost and is consistent with the purpose of the work. Except in an emergency endangering life and property, no extra work or change shall be made unless in pursuance of a written order, and no claim for an addition to the Contract Sum shall be valid unless the

additional work was so ordered.

- a. Modification of Quantities: The itemized quantities shall be considered by the Contractor as the quantities required to complete the work for the purpose of bidding. Should actual quantities required in the construction of the work be greater or lesser than the quantities shown on the items, an amount equal to the difference in quantities at the unit price bid for the items will be added to or deducted from the Contract Sum.
- b. When itemized quantities are not given in the Proposal, the work shown on the plans or specifications shall be considered by the Contractor to be included in his contract for the lump sum prices bid.

83 - Force Account and Extra Work

If the Engineer orders, in writing, the performance of any work not covered by the plans or included in the specifications, and for which no unit price or lump sum basis can be agreed upon, then such extra work shall be done on a Cost-Plus-Percentage basis of payment as follows:

- a. The Contractor shall be reimbursed for all costs incurred in doing the work, and shall receive an additional payment of 15% of all such cost to cover his overhead and profit for said work. In the event the Contractor has employed a subcontractor for this work, the total additional mark up shall be 20%, 10% for the Main Contractor and 10% for the subcontractor. The total mark up shall not exceed 20%. The City will not recognize subcontractors of subcontractors.
- b. The term "Cost" shall cover all payroll charges for persons employed and supervision required under the specific Order, together with all workmen's compensation, Social Security, pension and retirement allowances and social insurance, or other regular payroll charges on same; the cost of all material and supplies required of either temporary or permanent character; rental of all power-driven equipment at the current Associated Equipment Distributors (AED) rate; and any other costs incurred by the Contractor as a direct result of executing the Order, if approved by the Engineer.
- c. Except in an emergency endangering life and property, no extra work or change shall be made unless in pursuance of a written order, and no claim for an addition to the Contract Sum shall be valid unless the additional work was so ordered. The cost of the work shall be submitted to the Engineer along with the monthly pay request.

84 - Claims for Extra Cost

- a. If the Contractor claims that any instructions by drawings or otherwise issued after the date of the Contract involved extra cost under the Contract, he shall give the Engineer written notice thereof within seven (7) days after the receipt of such instructions, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedure shall then be as provided for changes in the work. No such claim shall be valid unless so made.
- b. Extra work not included in Article (a) but authorized after the date of the Contract that cannot be classified as coming under any of the Contract units may be done at mutually agreed upon unit price, or on a lump sum basis, or under the provision of Section 01500, Paragraph 83.
- c. Extra costs which result from delays which cause an interruption in the orderly progress of the work as described in Section 01500, Paragraph 79 hereinbefore, will be considered under the following conditions.
 - (1) No claim will be considered for delays less than five (5) hours in duration.
 - (2) No claim will be considered in cases where the Contractor is able, without undue hardship, to shift his work crew to other productive work on the same project in the same general work area.
 - (3) The claim for extra cost due to delay shall be computed on a cost plus percentage basis as hereinafter specified under Paragraph 83.
 - (4) Unavoidable delays caused by weather as defined in Section 01500, Paragraph 79 (D) (3) shall be cause for extensions of time. However, damage to the Contractor caused by weather or an Act of God shall not be cause for additional compensation or monetary adjustment.

85 - Correction of Work Before Final Payment

The Contractor shall promptly remove from the premises all material condemned by the Engineer, or as determined by the Engineer as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the Owner and shall bear the expense of making all work of other Contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned work and materials as promptly as possible, after written notice, the Owner may remove them and store the material at the expense of the Contractor.

86 - Liquidated Damages

Failure to complete the work within the number of days stipulated in the Agreement, including extensions granted thereto, shall entitle the Owner to retain from compensation otherwise due to be paid to the Contractor, or otherwise recover by all remedies of law an amount equal to \$_____ for each and every calendar day that the work is not complete.

It is agreed by and between the Owner and the Contractor that this sum has been established, not as a penalty but as liquidated damages and that it is reasonable and acceptable, as the City provides services necessary for the health and welfare of the public and due to the impracticability and extreme difficulty of fixing and ascertaining the actual damages sustained in such an event.

87 - Suspension of Work

The Owner may at any time suspend the work, or any part thereof by giving three (3) days notice to the Contractor in writing. The work shall be resumed by the Contractor within ten (10) days after the date fixed in the written notice from the Owner to the Contractor. The Owner shall reimburse the Contractor for expenses incurred by the Contractor in connection with the work under this Contract and adjust the date of completion as a result of such suspension. Nothing in this paragraph shall prevent the Owner from immediate suspension of the Contractor's work where, in the Engineer's opinion, the health or welfare of the public are at risk.

88 - Termination of Contract

A. TERMINATION FOR CONVENIENCE OF OWNER

The Owner may, at any time upon ten (10) days written notice to the Contractor, terminate (without prejudice to any right or remedy of the Owner) the whole or any portion of the Work for the convenience of the Owner.

The Contractor, in calculating his termination application for payment, shall develop his outstanding costs in accordance with Section 01500, Paragraph 83, including those materials in transit and uncancellable with the appropriate percentage markups;

subcontractors shall follow same procedures. All costs must be substantiated by adequate back-up documentation.

B. DEFAULT TERMINATION

The Owner may upon ten (10) days written notice to the Contractor, terminate (without prejudice to any right or remedy of Owner) the whole or any portion of the Work required by the contract Documents in any one of the following circumstances:

1. If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will ensure the Substantial Completion of the Work within the Contract time;
2. If the Contractor is in material default in carrying out any provisions of this Contract for a cause within its control;
3. If the Contractor files a voluntary petition in bankruptcy or a petition seeking or acquiescing in any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief for itself under any present or future federal, state or other statute, law or regulation relating to bankruptcy, insolvency or other relief for debtors;
4. If a trustee, receiver or liquidator is appointed for the Contractor or for all or any substantial part of the property of the Contractor; or if the Contractor makes a general assignment for the benefit of creditors or admits in writing its inability to pay its debts generally as they become due;
5. If the Contractor has filed against it a petition in bankruptcy under any present or future federal or state statute, law or regulation relating to bankruptcy, insolvency or other relief for debtors and the same is not discharged on or before forty-five (45) days after the date of the filing thereof; or if the Contractor is adjudged a bankrupt;
6. If the Contractor is adjudged a bankrupt, makes a general assignment for the benefit of its creditors, or if a receiver is appointed on account of its insolvency;
7. If the Contractor fails to supply a sufficient number of properly skilled workmen or proper materials;

8. If the Contractor fails to make prompt payment to Subcontractors for materials or labor, unless Contractor otherwise provides Owner satisfactory evidence that payment is not legally due;
9. If the Contractor persistently disregards laws, ordinances, rules, or regulations or order of any public authority having jurisdiction;
10. If the Contractor substantially violates any provision of the Contract Documents; or

If, after Contractor has been terminated for default pursuant to Paragraph B, it is determined that none of the circumstances set forth in Paragraph B exist, then such termination shall be considered a termination of convenience pursuant to Paragraph A.

If Owner terminates this agreement for any of the reasons enumerated in Paragraph B, then the Owner may take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the work by whatever method he may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

C. ALLOWABLE TERMINATION COSTS

If the Owner terminates the whole or any portion of the Work pursuant to Paragraph A, then the Owner shall only be liable to Contractor for those costs reimbursable to Contractor in accordance with Paragraph D, plus the cost of settling and paying claims arising out of the termination of Work under subcontracts or orders, pursuant to Paragraph D, which are properly chargeable to the terminated portion of the Contract (exclusive of amounts paid or payable on account of completed items of equipment delivered or services furnished by subcontractors or vendors prior to the effective date of the Notice of Termination), which amounts shall be included in the costs payable under (1) above, and the reasonable costs of settlement, including accounting, legal, clerical and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract, together with reasonable storage, transportation and other costs incurred in connection with the protection of disposition of property allocable to this contract.

Provided, however, that if there is evidence that the Contractor would have sustained a loss on the entire Contract had

it been completed, no profit shall be included or allowed hereunder and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss.

The total sum to be paid to the Contractor under this Paragraph C shall not exceed the Contract sum as reduced by the amount of payments otherwise paid, by the Contract price of Work not terminated and as otherwise permitted by this Contract. Except for normal spoilage, and except to the extent that the Owner shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor, as provided in this Paragraph C, the fair value, as determined by the Engineer, of property which is destroyed, lost, stolen or damaged so as to become undeliverable to the Owner.

D. GENERAL TERMINATION PROVISIONS

After receipt of a Notice of Termination from the Owner, pursuant to Paragraph A or B, and except as otherwise directed by the Engineer, the Contractor shall:

1. Stop Work under the Contract on the date and to the extent specified in the Notice of Termination;
2. Place no further orders or subcontracts for materials, services or facilities, except as may be necessary to complete the portion of the Work under the Contract as is not terminated;
3. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
4. Assign to the Owner in the manner, at the times and to the extent directed by the Engineer, all of the right, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification considered final for all the purposes of this clause;
6. Transfer title and deliver to the entity or entities designed by the Owner, in the manner, at the times and to the extent, if any, directed by the Engineer, and to the extent specifically produced or specifically acquired by

the Contractor for the performance of such portion of the work as had been terminated;

- a. The fabricated or unfabricated parts, work in process, partially completed supplies and equipment, materials, parts, tools, dies, jigs and other fixtures, completed Work, supplies and other material produced as part of, or acquired in connection with the performance of the Work terminated by the Notice of Termination, and
 - b. The completed or partially completed plans, drawings, information, and other property related to the Work;
7. Use his best efforts to sell, in the manner, at the times, to the extent and at the price or prices directed or authorized by the Engineer, and property of the types referred to in Paragraph D; provided, however, that the Contractor:
- a. Shall not be required to extend credit to any buyer, and
 - b. May acquire any such property under the conditions prescribed by and at a price or prices approved by the Engineer; and provided further that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Owner to the Contractor under this Contract or shall otherwise be credited to the price or cost of the Work covered by this Contract or paid in such other manner as the Engineer may direct.
8. Complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and
9. Take such action as may be necessary, or as the Engineer may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.
- a. The Contractor shall, from the effective Date of Termination until the expiration of three (3) years after Final Settlement under this contract, preserve and make available to the Owner, at all reasonable times at the office of the Contractor, but without direct charge to the Owner, all its books, records, documents, and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the Work terminated hereunder, or, to the extent approved by the Engineer, photographs, microphotographs or other authentic reproductions thereof.

In arriving at any amount due the Contractor pursuant to Paragraph C, there shall be deducted:

- b. All unliquidated advance or other payments on account theretofore made to the Contractor applicable to the terminated portion of this Contract;
- c. Any claim which the Owner may have against the Contractor;
- d. Such claim as the Engineer determines to be necessary to protect the Owner against loss because of outstanding or potential liens or claims; and
- e. The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of Paragraph D, and not otherwise recovered by or credited to the Owner.

Contractor shall refund to the Owner any amounts paid by the Owner to Contractor in excess of costs reimbursable under Paragraph C.

The Owner, at its option and Contractor's expense, may have costs reimbursable under Paragraph C audited and certified by independent certified public accountants selected by the Owner.

89 - Contractor's Right to Stop Work or Terminate Contract

If the Work should be stopped under an order of any court for a period of three (3) months, through no fault of the Contractor or of anyone employed by him, then the Contractor may, upon seven (7) days written notice to the Owner and the Engineer, stop work or terminate this Contract and recover from the Owner payment for all work executed, plus any loss sustained upon any plant or materials, plus reasonable profit and damages, as defined in Section 01500, Paragraph 83 (a).

90 - Settlement Upon Termination of Contract

Upon termination of this Contract in accordance with Section 01500, Paragraph 88 or Section 01500, Paragraph 89 settlement shall be computed on the basis prescribed in Section 01500, Paragraph 83 (a).

91 - Removal of Equipment

In the case of termination of this Contract before completion for any cause whatever the Contractor, if notified to do so by the Owner, shall promptly remove any part or all of his equipment from the property of the Owner, failing which the Owner shall have the right to remove such equipment at the expense of the Contractor.

92 - Laws of Georgia

This contract shall be governed by the Laws of the State of Georgia.

93 - Discrepancy between General Conditions and Technical Specifications

Should there be a discrepancy between the General Conditions and Technical Specifications, the Technical Specifications shall govern.

94 - Debarment and Suspension

Contractors or their principals who are debarred, suspended, proposed for debarment, declared ineligible or voluntary excluded by any Federal department or agency pursuant to the regulations implementing Executive Order 12549, 29 CFR Part 98, Section 98.510 shall be precluded from bidding on all City work for the period of their debarment.